

## INTERNATIONAL SEARCH REPORT

 Int: I Application No  
 PCT/GB2004/005142

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01S5/183 H01S5/024

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, IBM-TDB, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/039284 A1 (ZHENG JUN) 27 February 2003 (2003-02-27)	1-4, 8, 9
Y	paragraphs '0037! - '0039!; figure 2	17
X	WO 03/030316 A (OSRAM OPTO SEMICONDUCTORS GMBH; SCHMID, WOLFGANG) 10 April 2003 (2003-04-10)	1, 3
Y	page 10; claims 1, 2, 4, 5, 8; figure 8	17
X	MCINERNEY J G ET AL: "High-power surface emitting semiconductor laser with extended vertical compound cavity" ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 39, no. 6, 20 March 2003 (2003-03-20), pages 523-525, XP006020057 ISSN: 0013-5194	1, 3
Y	the whole document	17
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

25 February 2005

Date of mailing of the international search report

07/03/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KUZNETSOV M ET AL: "HIGH-POWER ( 0.5-W CW) DIODE-PUMPED VERTICAL-EXTERNAL-CAVITY SURFACE-EMITTING SEMICONDUCTOR LASERS WITH CIRCULAR TEM00 BEAMS" IEEE PHOTONICS TECHNOLOGY LETTERS, IEEE INC. NEW YORK, US, vol. 9, no. 8, August 1997 (1997-08), pages 1063-1065, XP000699799 ISSN: 1041-1135 the whole document	3
Y	HOLM M A ET AL: "ACTIVELY STABILIZED SINGLE-FREQUENCY VERTICAL-EXTERNAL-CAVITY ALGAAS LASER" IEEE PHOTONICS TECHNOLOGY LETTERS, IEEE INC. NEW YORK, US, vol. 11, no. 12, December 1999 (1999-12), pages 1551-1553, XP000924493 ISSN: 1041-1135 cited in the application	17
A	abstract; figures 2-5 page 1552	1,3
A	GARNACHE A ET AL: "Diode-pumped broadband vertical external-cavity surface-emitting semiconductor laser-application to high sensitivity intracavity absorption spectroscopy" QUANTUM ELECTRONICS AND LASER SCIENCE CONFERENCE, 2000. (QELS 2000). TECHNICAL DIGEST MAY 7-12, 2000, PISCATAWAY, NJ, USA, IEEE, 7 May 2000 (2000-05-07), pages 82-83, XP010544050 ISBN: 1-55752-608-7 the whole document	1,3,17
P,X	US 6 778 582 B1 (MOORADIAN ARAM) 17 August 2004 (2004-08-17) column 5, line 21 - column 7, line 3; figure 1	1
P,X	US 2004/013154 A1 (ZHENG JUN) 22 January 2004 (2004-01-22) paragraphs '0036! - '0051!; figure 1	1
P,X	LINDBERG H ET AL: "HIGH-POWER OPTICALLY PUMPED 1550-NM VECSEL WITH A BONDED SILICON HEAT SPREADER" IEEE PHOTONICS TECHNOLOGY LETTERS, IEEE INC. NEW YORK, US, vol. 16, no. 5, May 2004 (2004-05), pages 1233-1235, XP001212190 ISSN: 1041-1135 the whole document	3
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>LINDBERG H ET AL: "0.8µm optically pumped vertical external cavity surface emitting laser operating CW at 1550nm"</p> <p>ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 40, no. 10, 13 May 2004 (2004-05-13), pages 601-602, XP006022071</p> <p>ISSN: 0013-5194</p> <p>the whole document</p> <p>-----</p>	1,3

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			WO 03030316 A2	10-04-2003
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